

# Emerson's Wireless Solution Helps Optimize SAGD Oil Wellpad and Reduce Cost for Chinese Oil & Gas Producer

## RESULTS

- Lowered total cost by eliminating the high price of trenching, laying conduit, and pulling cables
- Enhanced operating performance with more accurate measurements
- Reduced start-up time with seamless integration and no site survey required



## APPLICATION

Monitoring wellhead pressure, temperature and controlling steam injection for onshore Steam-Assisted Gravity Drainage (SAGD) production

## CUSTOMER

Major Chinese Oil & Gas Producer

## CHALLENGE

Developing 50-60 wellheads annually, the producer initially planned to use traditional wired transmitters at each site. However, installing and maintaining wired transmitters requires a specific skill level. They were already facing long construction lifecycles and a tight schedule for commissioning. A lack of skilled workers and the risk of any delays from mistakes installing the wired transmitters would negatively impact the construction cycle for each well.

In addition to the need for a specific skillset, wired transmitters also require delicate and expensive trenching work. Considering the related manpower, time, and travel costs related to 50 to 60 wells a year added to the overall project costs. After the Producer evaluated the project's long-term outlook, using wired transmitters did not seem to be the most scalable nor cost-effective solution.

*“The solution using the WirelessHART™ and ControlWave™ Micro for the SAGD oil wellhead monitoring and control makes the field management easy, fast and effective.”*

## SOLUTION

Emerson's WirelessHART™ and ControlWave™ Micro RTUs were the solution chosen for the SAGD oil wellhead monitoring and control. The ControlWave Micro RTU auto-detects the WirelessHART devices as they are added to the network so there was no site survey required which reduced start-up time, eliminated the high cost of trenching, laying conduit and pulling cables. The network enabled their wireless field devices to automatically find alternate communication paths, avoiding obstacles so they had more flexibility during setup.

The Wireless solution improved their personnel safety by creating enhanced visibility and process knowledge of their operation eliminating unnecessary trips and minimizing time spent at the wellsite. The Wireless solution also controls steam injection into the wellhead automatically without involving manpower. The field instruments collected information to help monitor and analyze the indicated work statuses and triggered maintenance notices when applicable. The Chinese Oil & Gas producer are pleased with the WirelessHART and ControlWave Micro for their SAGD oil wellhead monitoring and control and how it has made their field management faster, easier and more efficient.

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